

Illinois U Library

11278

# ***SOUTHERN ILLINOIS***

## **business bulletin**

SOUTHERN ILLINOIS UNIVERSITY

CARBONDALE, ILLINOIS

VOL. 6

WINTER, 1956

NO. 1



**JOHNSTON CITY, One of Area's Dormitory Towns**

*In this issue . . . . .*

**MORE PROFITS THROUGH BETTER LAND USE**

**MANAGERIAL SESSIONS AT EAST ST. LOUIS**

**WHAT BUSINESSMEN SHOULD KNOW ABOUT LAW**

**NEW METHODS FOR ORGANIZATIONAL TRAINING**



## BUSINESS BRIEFS

The two newest additions to the Ordill industrial area are Rhein Sound Systems, Inc., formerly of Orlando, Fla., and Dura-Crates, Inc., Indianapolis. Rhein Sound Systems, makers of public address amplifiers and other equipment, has leased a building just south of the R.K. Manufacturing Co., its principal supplier. Dura-Crates is operating a branch plant of the Indianapolis firm in two buildings containing 20,000 square feet of floor space, south of the Crab Orchard Refuge offices. Initially, Dura-Crates is employing about 30 persons in making boxes and corrugated containers for shipping, and hopes to increase its working force to about 60. Some 25 to 30 persons will work for Rhein.

A new apparel plant is scheduled to begin operations at Newton February 1. A training factory with some 60 sewing machines will be set up in a downtown location while the firm, the E. R. Moore Co., is awaiting completion of a factory building in Newton. The firm, makers of caps and gowns, gym suits, and choir and clerical robes, was persuaded to come to Newton by the efforts of Jasper (County) Jobs, Inc. Employment at the plant is expected to reach 150 to 200.

Kemco, Inc., which has been manufacturing electric switch boxes at Carlyle, plans to begin making electric safety switches and panels early this year. E. M. Wiegmann, Belleville, who heads the board of directors, expects the expansion of the company's operation to bring about a doubling of the present working force of 27.

The Container Stapling Co., Herrin, has a 50,000 square foot building under construction on a site provided by the Herrin Chamber of Commerce. The company plans to expand its employment from 78 to about 130 when the building is completed.

A group of Tilden residents, headed by Mat Khoury, brother of the founder of Khoury League baseball, have organized their own industry. Tilden Garments, Inc., expects to have 10 employees early this year, turning out teenage wearing apparel in a building leased from the Oddfellows.

Southern Illinois, Inc., is conducting an intensive membership campaign to raise its annual budget from \$15,000 to \$25,000. Memberships are \$100 annually. The additional funds would be used by the regional promotion organization for advertising industrial possibilities and contacting prospective industries. The 15-year-old organization has been responsible for bringing new industries to Southern

SOUTHERN ILLINOIS  
BUSINESS BULLETINWinter, 1956  
Vol. 6 No. 1

The *Southern Illinois Business Bulletin* is published quarterly by the School of Business and Industry, Southern Illinois University, Carbondale. Second class mail privileges authorized at Carbondale, Illinois.

Subscription is free.

President of the University ..... D. W. Morris  
Dean of the School of  
Business and Industry ..... Henry J. Rehn  
Editors ..... Edmund C. Haheisy  
Milton T. Edelman  
Editorial Board ..... Henry J. Rehn  
Edmund C. Haheisy  
Milton T. Edelman  
Lewis A. Maverick

Illinois and has vigorously promoted such things as better roads, transportation facilities, educational improvements and greater recreation opportunities.

A chicken processing plant has opened at Mt. Sterling through the efforts of an industrial corporation formed locally at the instigation of the industrial committee of the Chamber of Commerce. The plant opened on a three days a week basis with 188 employees who process about 3,000 chickens a day.

DuQuoin is looking for an occupant for its newly-finished factory building which was constructed with funds raised locally. The shell of the

(continued on page 4)

## MARION NEXT ON "CITIES" LIST



Marion Courthouse

Due to the heavy volume of copy received from contributors for this issue of the *BUSINESS BULLETIN*, our regular "City Series" article has been omitted. In the next issue, scheduled for publication in April, the *BUSINESS BULLETIN* will feature Marion, Illinois.



## JOHNSTON CITY STUDY SHOWS 53% OF WORKERS COMMUTE

By Dalias A. Price and William B. Sanders

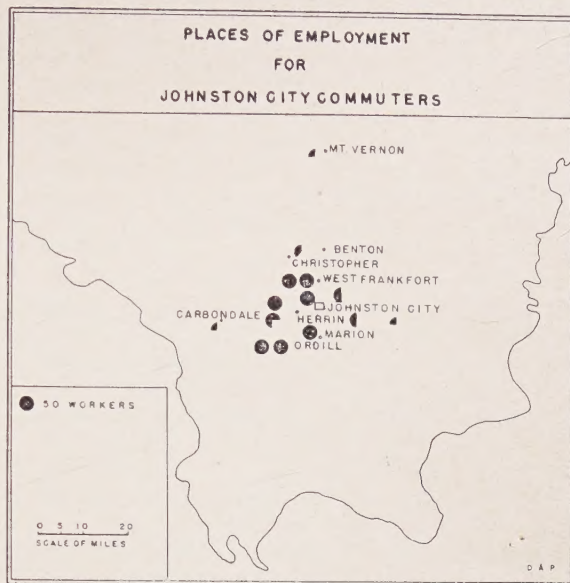
Generally most census data which deal with employment structures of cities do not distinguish between commuting and resident workers for a particular city. If such data are relied upon solely one can only assume that all of the residents of a city work there.

In this age of rapid and easily accessible transportation facilities workers no longer are forced to live in proximity to their jobs. Frequently, if a plant closes down or lays off employees, many seek work a considerable distance from their homes but continue to live in their home town and commute daily.

Johnston City, Illinois, is strategically located for just such a commuting working population. In the first place, mining which formerly was the most important industry sustaining the city has been declining for several years, thereby forcing the city's workers to range afield for employment, often of another type.

Secondly, Johnston City fortunately is located within a radius of a few miles of several other cities so that its residents have a greater variety of types of work from which to choose. It has been said that Southern Illinois is a region of dispersed cities. If that is so, Johnston City is centrally located relative to the dispersed metropolitan district of "Coal Belt Towns" and to job opportunities here.

*Dalias Price is an associate professor of geography at Southern Illinois University. William B. Sanders, a Johnston City resident who received bachelor's and master's degrees at SIU, is now working for his doctorate at Northwestern.*



### Data From Interviews

The authors made a survey of Johnston City's employment structure in 1955, obtaining their data from interviews rather than from the United States Census. The census data would indicate that Johnston City is a manufacturing city since 29 per cent of its labor force is in that category. Mining, as indicated by the same source, would account for some 20 per cent of the employed of the city. One would conclude, therefore, that Johnston City is primarily a manufacturing and mining city. Is that really the case, though, when the element of local versus commuting employment is considered?

The authors' study shows that 80 per cent of Johnston City's residents who are engaged in manu-

(continued on next page)

TABLE 1

### TOTAL EMPLOYMENT OF JOHNSTON CITY, 1955 LOCAL AND COMMUTING

Industrial Component	Total		Local		Commuting	
	Number	Percent	Number	Percent	Number	Percent
Manufacturing	316	29	62	20	254	80
Mining	224	20	0	0	224	100
Service	188	17	155	83	33	17
Trade	173	16	141	82	32	18
Educ. Service	89	7	87	99	22	1
Government	51	5	25	50	26	50
Other	64	6	51	80	13	20
	1,105	100	521	47	584	53

Source: Computed from field data, 1955



# COMMUTERS (cont.)

facturing commute away from town daily. (Table 1). In addition, as indicated by the same table, all persons engaged in mining also commute. Actually, service, trade, and educational services are the only employment categories which are predominately local in nature. Certainly, manufacturing and mining are the most important industries which support the economy of Johnston City but they cannot be considered the primary functions within the city.

What then are the primary functions of Johnston City and its economy? First, it is a trading center for an area of approximately 36 square miles. Secondly, it is what might be called a dormitory city. The dormitory function of a city can be defined as the function of providing living facilities, trade and other services for its inhabitants—a considerable proportion of whom work outside the city. Local employment accounts for only forty-seven per cent of all employed workers who reside in Johnston City. The leading primary activities which support local employment are manufacturing, service and trade.

## Locally Employed and Commuters

*Local Manufacturing.* A total of 62 persons are employed locally in manufacturing, which is only 20 per cent of all the gainfully employed who live in Johnston City. The Johnston City Manufacturing Company employs a total of 67 people, 64 of whom are women. Eighty per cent of the employees of this company reside in the city.

*Commuting Employment* account for 53 percent of all workers who reside in Johnston City. The leading activities of commuters are manufacturing, mining, service and trade, and these same sources of employment sustain the economy of the city most significantly. (Table 1). The ratio of local to commuting employment for Johnston City is 100:110 which means that for each 100 persons working locally 110 commute to work beyond the city. Table 2 shows the one way distance traveled by commuters. A majority of the workers who commute travel 10 miles or less to work away from Johnston City.

The accompanying map shows that most of the commuters work in Herrin, Ordill, Marion in the

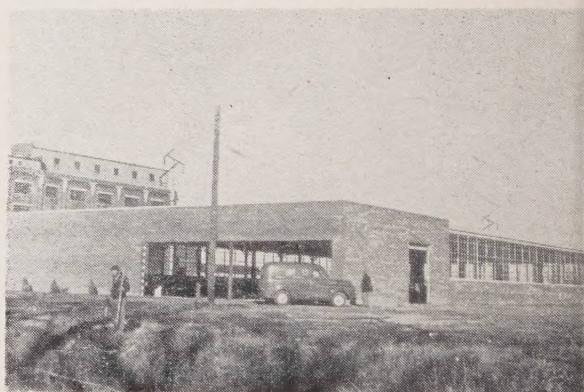
order listed. The greatest distances traveled to work are to Mount Vernon and Carbondale.

Although total employment in southern Illinois cities has been declining, this trend is not necessarily a continuing one. Coal mining has been affected the most recently but is showing signs of rallying. The opening of new manufacturing plants in any of the "Coal Belt Towns" will absorb workers from all, Johnston City included. Residents of Johnston City who are skilled in mining will search employment anywhere within a radius of 35 miles and continue to live at home, if present trends continue.

Southern Illinois needs more industry and manufacturing. It is not so important just where plants are established in the region as it is to have them. All of the cities in the area will feel the impact, including Johnston City. This city is centrally located and its working population has demonstrated a willingness to commute to work rather than to move elsewhere. Such reluctance to move away from Johnston City show that it must be a pleasant place in which to live and speaks well of the city and its people.

## BRIEFS

(continued from page 2)



## Du Quoin Factory

20,000 square foot building was put up with \$57,000 collected by the DuQuoin Business Association from local residents who contributed sums of \$1 and up.

## SIU HISTORY AVAILABLE

Friends of Southern Illinois University may be interested in a recently published book by E. C. Lentz, former Dean of Men at Southern Illinois University. His book is entitled *Seventy Five Years in Retrospect* and is a history of the progress of Southern from a normal school to a teachers college to a university. It is bound in cloth stamped in gold, is attractively printed, and well illustrated. Copies may be ordered from the University Bookstore, Southern Illinois University, Carbondale, Illinois, for \$3.00 each.

Table 2

## One-Way Distances Traveled by Commuting Employment of Johnson City, 1955

Distance	Number	Per Cent
Over 30 Miles	8	1
20 to 30 Miles	17	3
10 to 20 Miles	135	23
5 to 10 Miles	313	54
Under 5 Miles	111	19
Total	584	100



## GOOD FARMLAND USE IMPROVES AREA AGRICULTURAL ECONOMY

By J. P. Vavra and C. V. Hess

Farm operators in Southern Illinois, like all other farmers, are feeling the effects of sagging farm prices. However, lower farm prices are felt more by the low income producers than by the high income farmers. The latter group is less affected because they are more efficient producers, economically achieving higher yields per acre. The basic costs of preparing the seedbed, planting, and harvesting are the same for a 15 or 20 bushel per-acre wheat yield as for 35 or 40 bushels per acre. The proper use of fertilizers and improved soil management practices are the usual causes for the higher yields.

The soils of Southern Illinois vary considerably between the bottomlands of Mississippi and Ohio

*Drs. Vavra and Hess are Soils Specialist and Agricultural Economist, respectively, School of Agriculture, Southern Illinois University. Dr. Vavra, a member of the SIU faculty since 1951, has a doctorate in soil chemistry from Purdue University (1952). Dr. Hess, supervisor of Test Farms at SIU since 1954, has his doctorate in agricultural economics from Iowa State College.*

valleys and the uplands of Washington and Franklin Counties. Upland soils generally are composed of a thin layer of loess (wind deposited material) over weathered Illinoian glacial till deposits. During soil development, clay accumulated in the subsoil, forming a tight, thick compact layer starting about 15 to 20 inches below the soil surface. This layer sometimes is referred to as a clay pan. This layer restricts both the rooting volume of the crop plants and the downward movement of water. It contributes to a drouthy condition during limited moisture periods and also limits the ability of the soil to absorb an adequate quantity of water during rainy periods. The restricted root development limits the feeding zone of the roots. In addition to the subsoil, permeability problems, the soils are strongly acid and generally low in nitrogen, phosphorus, potash and organic matter.

These conditions produce problems for Southern Illinois farmers that are quite different from those in corn belt areas where soils are potentially more productive. Despite these soil characteristics, Southern Illinois farmers that are quite different from several improved soil management practices will enable the Southern Illinois farmer to become a more efficient producer. Low yields will reduce profits. As yields are increased economically, the

(continued on next page)

Table I. Budget of Fertilizer Costs, Gross Return and Return above Fertilizer Cost per acre for a Rotation of Wheat-Mixed Hay-Corn-Soybeans on Land Class II and III Soils for Southern Illinois, 1955.

Crop	Annual Fertilizer	Cost <sup>1</sup>	Yield <sup>2</sup>	Price <sup>3</sup>	Gross Return	Return per Acre above Annual Fertilizer Cost
Wheat	250 lbs. 4-16-16 20 lbs. Nitrogen	\$7.75 2.40	35 bu.	\$1.80	\$63.00	\$52.85
Clover-Timothy	No Fertilizer		1.5 ton	21.00	31.50	31.50
Corn	200 lbs. 4-16-16 50 lbs. Nitrogen	6.20 6.20	70 bu.	1.00	70.00	57.80
Soybeans	No Fertilizer		22 bu.	2.08	45.76	45.86

<sup>1</sup>Prices for November, 1955, as follows: 4-16-16 at \$62 per ton; Nitrogen at \$.12 per lb.; Limestone at \$3.50 per ton spread; Rock Phosphate at \$22 per ton spread; Muriate of potash \$54 per ton; 20% Superphosphate at \$45 per ton.

<sup>2</sup>Yield expectations based upon experimental trials at Brownstown and Carbondale, Illinois Stations.

<sup>3</sup>Prices for Southern Illinois, November 1955, according to Illinois Cooperative Crop Reporting Service.

\*Class II soils are those requiring moderate restrictions in use, because of erosion, drainage, or heavy clay subsoils.

Class III soils are those requiring severe restrictions in use, because of severe erosion hazard, drainage or tight clay subsoils.



**LAND USE** (cont.)

unit cost of production will decrease. For example, it costs less to produce each bushel of wheat on our better soils when the yield is 40 bushels per acre than when it is only 20 bushels per acre.

**Improving the Fertility Level**

Since the general level of Southern Illinois soils is low in organic matter, limestone, nitrogen, phosphorus and potash, these materials should be added to the soils for increased crop yields. Organic matter can be added in the form of crop residues, green manure crops and farm manure. In addition, an appropriate rotation for the land should be followed. Hilly land should be planted to permanent pasture crops. On more level land a soybeans-wheat-clover-corn rotation may be followed by a green manure crop, such as rye, planted in the fall following the corn and then turned under in the spring. In this way, additional organic matter is put into the soil.

Soil fertility experiments show that a total build-up application of fertilizers is most profitable. An application of limestone will increase yields, but these will be limited by the amount of nitrogen, phosphorus and potassium available. A typical acre of Southern Illinois soil which is acid and low in both phosphorus and potash, will require a basic application of four or five tons of limestone, 1200 pounds of rock phosphate, 200 pounds of 20 per cent superphosphate, 350 pounds of muriate of

potash. In addition 20 to 30 pounds of nitrogen per acre are required for wheat and 50 to 80 pounds for corn.

If the land Class II and III soils\* of Southern Illinois were subjected to a four year rotation of wheat, followed by one year each of mixed clover-timothy hay, corn and soybeans, one could expect the response indicated in Table I below. This assumes normal rainfall, a reasonably high level of management and the basic application of limestone, rock phosphate, superphosphate and muriate of potash as outlined above.

The rotation would yield an estimated return of \$187.91 above the annual fertilizer cost. If the cost of the basic fertilizer application, \$28.58, (prorated for the length of the rotation) is subtracted, a return of \$159.33 could be expected for the rotation, or an average annual return per acre of \$39.83 above all fertilizer.

Annual applications of fertilizers normally will maintain a balanced level of nitrogen, phosphorous and potash after the initial basic application. The only exception to this will be limestone which should be applied approximately every six years at the four-tons per acre rate. Therefore, for consecutive rotation cycles only the cost of limestone as a basic fertilizer at a cost of \$9.38 needs to be borne by the rotation. Thus there will be a net return of \$178.53 above all fertilizer or an average annual return (above all fertilizer) of \$44.63 per acre.

(continued on next page)

Table II. Budget of Fertilizer Costs, Anticipated Gross Returns and above Fertilizer Costs per Acre for a Rotation of Wheat-Alfalfa Brome-Alfalfa Brome-Alfalfa Brome-Corn-Soybeans on Well-drained Land Class II and III Soils of Southern Illinois, 1955.

Crop	Annual Fertilizer	Cost <sup>1</sup>	Yield <sup>2</sup>	Price <sup>3</sup>	Gross Return	Return per Acre above Annual Fertilizer Cost
Wheat	250 lbs. 4-16-16 20 lbs. Nitrogen	\$7.75 2.40	35 bu.	\$1.80	\$63.00	\$52.85
Alfalfa						
Brome	No Fertilizer		3.0 tons	25.00	75.00	75.00
"	200 lbs. 0-20-20	6.50	3.5 tons	25.00	87.50	81.00
"	200 lbs. 0-20-20	6.50	2.5 tons	25.00	62.50	56.00
Corn	200 lbs. 4-16-16 40 lbs. Nitrogen	6.20 4.80	75 bu.	1.00	75.00	64.00
Soybeans	No Fertilizer					

<sup>1</sup>Prices for November 1955, as follows: 4-16-16 at \$62 per ton; Nitrogen at \$.12 per lb.; 0-20-20 at \$65 per ton; Limestone at \$3.50 per ton spread; Rock Phosphate at \$22 per ton spread; Muriate of Potash at \$54 per ton; 20% Superphosphate at \$45 per ton.

<sup>2</sup>Yield expectations based upon experimental trials at Brownstown and Carbondale, Illinois Stations.

<sup>3</sup>Prices for Southern Illinois; November, 1955, according to Illinois Cooperative Crop Reporting Service.



**LAND USE (cont.)**

Costs for seed, seed-bed preparation, tillage, harvesting, and storage or handling must be subtracted from the \$44.63 return per acre before a return to land can be computed. These costs will vary considerably from farm to farm depending on the type, size and condition of machinery, the machinery investment in relation to acres operated, and associated operational practices. For this reason, no attempt has been made to compute these costs. Each producer may deduct whatever he thinks his costs of this type are from the return-above-fertilization costs to arrive at a return to his land.

The above rotation is a typical one for the area. Agronomists and soil conservationists, however, have been concerned greatly about the erosion dangers in this four-year rotation with the land in sod only one-fourth of the time. This is particularly true of the Land Class III soils where severe restrictions in use must be practiced because of slope drainage and subsoil conditions.

**An Alternate Rotation**

For this reason and the probability of continued acreage reductions for surplus crops such as corn, wheat, or perhaps soybeans, a budget of returns and fertilizer costs was computed for an extension of this rotation to one having three years of hay in place of only one year of sod (Table 2). The clover-timothy mixture has been replaced with an alfalfa-brome-grass-timothy mixture which will be maintained for three years unless unfavorable climatic conditions reduce the longevity of stand.

Since the land will be in sod three years out of every six under the proposed alternative rotation, as compared to one year in every four years for the wheat-mixed hay-corn-soybeans rotation, the yields will be greater under the six-year rotation. This is due to increased soil aeration and improved water permeability brought about by the deep-rooted alfalfa plants. The combination of alfalfa and brome-grass for successive years also increases the accumulation of humus and nitrogen. An accumulation of organic matter will benefit soil tilth and improve the soil's ability to utilize more effectively the applications of commercial fertilizers. Nitrogen accumulation will benefit the succeeding corn crop and reduce the quantity of commercial nitrogen fertilizer needed. This is represented by reducing the nitrogen application to 40 pounds per acre for corn. The anticipated yields under the six-year rotation will be increased from 70 to 75 bushels of corn per acre and from 22 to 25 bushels of soybeans per acre.

(tion period), were subtracted the return for the According to the budget as presented in Table II, the rotation would yield an estimated per-acre income of \$381.35 above annual fertilizer costs for the six-year rotation period. If the cost of the basic fertilizer treatment, \$43.10 (pro-rated for the rota-

rotation (above all fertilizer costs) would be estimated at \$338.25. This would amount to an average annual return per acre (above all fertilizer costs) of \$56.38 as compared to \$39.83 for the previously discussed four-year rotation. After the initial basic application of fertilizer, only limestone at the rate of four tons per acre each six years would be required. Assuming this to be the case for subsequent cycles of the rotation, the average annual return per acre above all fertilizer costs would be \$61.22 as compared to \$44.63 for the previous rotation.

Since the soils vary considerably from field to field and from farm to farm, the yield responses must be considered as only projected averages. However, assuming the recommended levels of fertilizing to be the most profitable at current prices, it would be profitable to fertilize to even higher levels under more favorable prices for crops. Under less favorable prices, it would be wise to reduce fertilizing.

**More Good Hay Crops Needed**

The budget data would tend to support the hypothesis that the upland, better drained soils of Southern Illinois are better adapted to a rotation which includes more years of a high-yielding legume-grass hay mixture such as alfalfa-brome-timothy. The budget in Table II assumes the hay will be sold directly. However, on most farms it would be marketed through livestock. Under efficient methods of livestock production this hay would most likely bring a higher return than the \$25.00 per ton used in the budget calculations and also would allow the farm-operator to utilize to greater efficiency many of his other resources, such as labor, buildings and equipment which may not be used to capacity under a less intensified livestock program.

This particularly is true on smaller farms located on upland soils where a combination of reduced acreage allotments for corn and wheat, lower prices for corn and other small grains, and the yield disadvantages for these crops relative to the more fertile areas of the state has placed these farms at a distinct disadvantage in the area. A combination of these factors and the need for retarding erosion and maintaining soil fertility will force Southern Illinois farmers to reconsider their land use patterns.

The merit of shifting land use to more roughage depends upon the degree to which the additional forage produced can be utilized efficiently and profitably. The economic justification for greater emphasis on forage lies in (1) proper attention to recommended forage production practices to insure high yields of high quality forages, and (2) a balanced livestock program to insure a profitable market for the roughage. In typical heavy grain farming areas, this shift to more forage and live-

(continued on page 14)



The two following articles, "Prospective Businessmen Need Adequate Knowledge of Law" by Robert W. Tunnell and "New Methods Suggested for Business Organization Training" by Frank F. Stamberg are a new departure for the *BUSINESS BULLETIN*. They discuss the problem of proper training for graduates in business administration today. Both Mr. Tunnell and Mr. Stamberg view this question from the standpoint of a practitioner in his respective field who has also been associated with the teaching of college students. Mr. Tunnell is a lawyer and Mr. Stamberg an industrial engineer. Because of their specialized practical background they are able to see the need for intensive training in these fields. In subsequent issues the *BUSINESS BULLETIN* will present other aspects of this problem. One such problem is how the need for intensive training in many specialized fields can be integrated with each other and with the overwhelming problem of the need for businessmen who are also well-rounded citizens with a knowledge of economic, social, political, historical, psychological, and humanitarian questions.

### **PROSPECTIVE BUSINESSMEN NEED ADEQUATE KNOWLEDGE OF LAW**

by Robert W. Tunnell

With the natural growth of our economic structure, the business administration graduate today finds himself bewildered by many practical aspects of what he needs to know to pursue successfully his profession in actual business.

Scholarship, worthy in itself, is not enough to make a competent and well-grounded businessman; the business neophyte needs to know as well the means by which his learning may be put to effective use. Probably the time has arrived when there will be a teaching in all business schools of the "know how" to serve the young graduate in his application of the law to his business.

I do not mean that experience is not still the best teacher; but preparation for experience, by teaching of as many practical things as possible is certainly needed. It may be noted, of course, that the lack of knowledge of many practical matters is not confined to possessors of newly acquired degrees, but is and may be found among those who have learned the "hard way" and at a terrific ex-

---

*Robert W. Tunnell is lecturer in law, in the department of Business Administration, Southern Illinois University. He is a graduate of Washington University Law School and a member of the bar of Illinois, Missouri, and New Mexico. He was a practicing attorney for many years, has taught at Washington University and the University of San Francisco. Before coming to SIU, he was in charge of probate division of Indian Trust Estates for the Office of Solicitor, Department of the Interior of the United States.*

pense to their business.

The modern businessman has been attempting to adjust himself to our fast moving economy for the past 30 years, and with the growing complexity of our economic structure, the businessman of today faces legal problems that relate not only to his personal life, but to the very roots, structure, and future life of his business.

If our economy is to survive, the law, which regulates our economy must keep pace with the terrific rush. This the law is doing.

The law is not an exact science and the businessman cannot rely upon the old rules set out in some commercial law book and survive. He must know the law as it pertains to his business. He must understand the legal structure and the legal effect of the structure of his corporation. I do not mean, however, that he must be as skillfully trained as a lawyer, but he must be well-grounded and attain skill in some phases in the law and know his legal structures of modern business. It is not uncommon for students who never intend to practice to graduate from law school, but use the law for a background in business and to be well prepared to operate his corporation properly.

As the surgeon must have a sound knowledge of the parts and functions of the human body, so the business administration student must understand and be well-grounded in the laws which govern our lives and particularly the laws which govern his business and the legal structure and organization of his small or large business.

### **Business Law Teaching Inadequate**

In the past, business schools have taken the subjects of contracts, negotiable instruments, partnerships, corporations, employment, labor law, credits, and others, each of which would be a full semester subject in any law school and have thrown them at the business law student in two or three school quarters. These have often been taught by someone with no training in the law. It was just a subject kicked around and not really wanted.

I am making no attempt to belittle those instructors who have struggled with the course without tools to work with; I salute them for their brave attempt to teach something that they knew little about. We must remember that all legal subjects are related, and to teach any one takes a working knowledge of the other.

The cry in business administration schools has always been that we are not teaching them to be lawyers. But under the existing system in the majority of business schools, what are we teaching them as to the law? We say when the time comes "hire a lawyer". How are they to know when the time has arrived unless they are well-grounded in the legal structure of their organization and allied problems?

(continued on page 10)



# RECENT MANUFACTURERS MEETINGS INDICATE NEED FOR SELF-ANALYSIS

by Ralph Bedwell

The Small Business Institute of Southern Illinois University has reached two conclusions as a result of a series of meetings with small manufacturers: 1. There is a great need for the small businessman to take time out periodically to evaluate himself and his company's operations; 2. Because the manager of a small business must fill all administrative capacities such as production manager, sales manager, comptroller, public relations and others, he will leave unanswered many of the questions or problems that a larger firm would answer through its specialists. The small firm rarely takes advantage of outside professional assistance.

At a series of nine meetings for small manufacturers recently concluded in East St. Louis, the Small Business Institute attempted to assist the managers in finding solutions to their administrative problems as well as give answers to specific problems affecting the individual types of manufacturing represented.

Starting on October 19 and continuing one night a week until December 14, (20) businessmen sat down at an informal conference table to hear an outstanding speaker discuss the topic under consideration. A panel of consultants consisting of specialists in the field and University faculty then supplemented the speech. Following the presentations, class members "shot" questions

at the experts and exchanged ideas. The free flow of information gave the group greater insight into their own operations.

Problems of administration are obviously not in just one field of manufacturing since the participants represented the areas of dairying, textiles, lumber, printing, stoves, coal, enameling, metal fabricating, paints. There was also an attorney. The topics considered at the nine meetings were:

- 1) Planning for profit.
- 2) Financing your business.
- 3) Developing new markets.
- 4) Sales forecasting & production control.
- 5) Analysis of simple financial statements.
- 6) Controlling of expenses.
- 7) Taxes and regulations.
- 8) Personnel and public relations.
- 9) Graduation dinner.

## Wilford White Is Speaker

Each session was highly successful in developing the problems in the field, and the consultants proved capable of handling most of the specific questions addressed to them. The opening meeting was high-lighted by a talk by Dr. Wilford B. White of The Small Business Administration, Washington, D. C. He described administration as "looking at your business as a whole."

"Small businesses," he said, "are forced to make too many crisis decisions which must be solved right now."

He went on to say that other administrative problems are the need for more experience in all phases of management, the over emphasis or what the owner knows best, too little time for planning, insufficient long-range planning, inability to determine desirable size, inadequate cost control, unwillingness to share ownership, inability to meet changing business conditions and the lack of knowledge of where to go for help.

"Business can be no better than its boss," he said.

In the second session, Oscar Schafale, banker from Marion, Illinois, pointed out the need for complete financial records before seeking new capital whether borrowed or risk. In the next session, Mr. Walton Marsh, President of Marsh Stencil Machine Company, Belleville, assisted by an outstanding panel, emphasized the need for a sound sales program, the necessity of a fair pricing policy for customers as well as salesmen and the features of a well planned advertising policy.

Several of the keynote speakers represented large manufacturing firms. These men were chosen to discuss topics which large industry has developed to a great degree of efficiency. Many of their practices were entirely adaptable by smaller companies. The two accounting sessions were of this nature.

(continued on next page)



Ralph Bedwell (third from left) director of the SIU Small Business Institute, talks with a group of East St. Louis businessmen attending a series of managerial conferences sponsored by the University. Others pictured (l. to r.) are: Milbur Pitchford, sales manager for Illinois Electric Works; Lane Wilton, accountant for C. K. Williams and Co.; Joe Cavataio, president of Illinois Electric; Rudolph V. Serth, sales manager for Illinois Electric, and Sam Cavataio, Illinois Electric service manager.



**SMALL BUSINESS** (cont.)

The final meeting on December 14 was concluded with a dinner and a short address by Dr. George Hand, vice president of SIU. Certificates of satisfactory completion were given to all participants who attended a required number of sessions. Dr. Hand summarized the entire series of meetings, emphasized constant alertness for small business leaders in our present economy and called for stronger action on the part of all business in today's civic and political affairs.

At the conclusion of each meeting, all participants received take-home material covering the topics discussed. Other business booklets of stimulating nature were also distributed. The Small Business Institute plans to offer a comparable series of meetings in the Marion-Herrin area next spring. Plans are also being made to develop two retail series for the Carbondale and Mt. Vernon regions. Anyone interested in such courses should contact the Small Business Institute, Southern Illinois University, Carbondale.

**LAW** (cont. from p. 8)

Those who are skilled in corporate organization will tell you, I believe, that the average businessman of today has little conception of proper organization. If that is true then the average businessman is certainly deficient in the legal structure as well. Do you realize that some of our greatest financiers are better students of legal structure than most lawyers. Why? Because they have studied it and it has been drilled into them. They needed it to be successful in corporate organization and in the fast moving planning and reorganization of today.

**Law Businessman Should Know**

Let us analyze just what legal phases the businessman is interested in today—not as of 30 years ago.

1. He must know how to organize his corporation, legally.
2. He must know the legal rights and powers of his stockholders.
3. He must know the authority of the board of directors.
4. He must be well-grounded in labor law and labor relations—not only from an economic viewpoint, but from the full legal aspects. He must know what arbitration means, how it is handled, from the beginning of contract negotiation through the procedures of the courts.
5. He may want to re-organize his corporation so he must be able to cope with the legal and financial functions. Corporate finance is a “must” for the well-grounded student.
6. He must have a well-grounded knowledge of the law of management, production, and finance.

7. He must be able to plan the future operations of his corporation from a legal standpoint and to keep up with fast moving changes in the law, as pertains to the roots of its existence.

8. He must know when he needs the service of a well-grounded lawyer in his particular field. If a lawyer's advice were sought in all of these problems, the lawyer would soon eat up all of the profits of his business.

9. He must understand the law and its procedures with reference to administrative boards. During the past 30 years administrative law has become very complex.

**What Education Should Do**

What is the answer from the legal point of view? What is our duty as teachers in school of business administration who teach the business law? What is the duty of those who teach production and management? My thought would be that those who teach production and management dwell heavily on organization. The student needs it. Labor law should be taught in connection with production and from a legal, as well as an economic viewpoint. The legal aspects of corporate organization and reorganization should be a “must” for a well-grounded student. In fact corporations, their legal structure, the legal functions of their boards and stockholders together with labor law and administrative law should be taught as thoroughly in business schools as in law school. Other aspects of legal training, such as contracts, negotiable instruments, etc., should be segregated, with some required and others elective.

At this point we may note that medical and dental schools dwell heavily on the practical aspects, nursing schools require a definite and continuous internship, law schools have their moot courts, and in many other courses the student learns practical applications. Teachers colleges require practice teaching, engineering schools have been leaders in this type of training. Realizing that, should business schools deny their students that opportunity when they are charged with the duty of turning out a highly trained student? It is true that many courses can only be taught through theory. It also is true that in others both theory and the practical aspects can be given.

My teaching experience has been mainly in law schools and in addition, I have enjoyed many years in private practice. It is only recently that I have taught business law in a school of business administration. However, limited experience in a new venture often carries with it the advantage of a certain detachment; an opportunity to evaluate from a distance, denied to those too closely involved in the problem. It is in this hope that I have presented this.



## NEW METHODS SUGGESTED FOR BUSINESS ORGANIZATION TRAINING

by Frank F. Stamberg

In East St. Louis, Illinois, the first series of Managerial Conferences was concluded recently. It was conducted by the Small Business Institute of Southern Illinois University. Each conference was singularly successful. Requests for more such series have been received—some from unexpected sources. Perhaps, this is the most gratifying aspect of the entire undertaking. More details will doubtless be published by others better qualified to do so.

My personal concern was with the unusual opportunities these conferences afforded in observing again at close range a group of typical businessmen in action. During each conference questions were asked, answered and discussed with complete candor—without hesitation. Exchanges of ideas were made freely. Matters verging on the confidential were given full and free discussion. That the businessman of a small enterprise remains a rugged individualist was amply verified. In fact, many of the key speakers and panelists were businessmen from large companies. And they, too, showed unmistakably the characteristic ruggedness of which all professional managers seem to be made.

### What About Organization

Discussions frequently preceded, and always followed, each conference session. Questions concerning organization, and its bearing on the subject matter of the evening, usually arose. The answers and responses were surprisingly typical of successful (profit making) businessmen, anywhere. Men who manage enterprises, small or large, readily admit that they "do NOT know it all" about business. They are eager about anything new. New products, new materials and new techniques are avidly sought by every successful businessman. But "as to Organization": Well, this is one subject about which each businessman feels deeply that he is well—in fact very well—informed. And, he usually is ready to prove it—right now! He will sketch and diagram organization charts in as much detail as paper and time will permit. Questions as to these charts usually provoke discussions which are not as lucid as the charts at first indicate. Comments get less glib and less positive as discussion progresses. Usually, the discourse winds up in an atmosphere of pseudo-mystery. Business organization, to the businessman, appears to take on many vagaries. It is not subject to comprehension by a layman nor entirely a logical approach. In fact, some even contend

*Frank F. Stamberg is a lecturer in the department of business administration, Southern Illinois University. His specialty is industrial engineering. He is a graduate of the College of Engineering, University of Illinois, and for 23 years operated his own management consulting firm. His previous teaching experience was at Roosevelt University.*

that it cannot be learned—certainly not from books; long experience may help.

Actually, a good organizer is born not made. Many successful businessmen believe that somehow they are endowed with some superior ability which qualifies them as able organizers of their businesses. A successful businessman is presumed to be a successful manager, who in turn is assumed to be an able organizer. In fact, the words management and organization go together in business parlance and in the literature. When one is uttered, the other seems to be presumed. After East St. Louis one question remains:

Are the businessmen of small or large enterprises really skilled in organization?

### What Consultants Say

From my personal experience with them my answer is NO. This is confirmed by all of my colleagues engaged in consulting work in the management field. As an example: Signs, such as this, are frequently displayed on factory buildings. They are mute confirmation of the answer—NO.

### SHIPPING AND RECEIVING DEPARTMENT

Receiving activities occur at one end of the production function; shipping activities, at the other. Yet, too frequently both are combined into one department in medium and large size business.

Many other poor organizational practices occur. Not all are as common nor as obvious as the one indicated above. But they do exist and many are malignant in that they lie at the root of managerial problems but defy easy identification, except in the broadest terms, and are seldom corrected but are tolerated from year to year.

Solutions to problems arising therefrom require corrections of poor organization—usually a major operation. Consulting engineers in the management field agree that most of business problems they are asked to solve stem from poor organization. In fact, some contend that over 75% of these problems arise from defects in the organizational structure of business.

For these and kindred reasons, I have wondered about our universities and the graduates from their schools of Business Administration. Are they sufficiently skilled in organization? This question was not initiated at East St. Louis. It was asked almost 10 years ago, when I undertook my first teaching assignment in Chicago.

At that time, this question induced a review of all of the textbooks currently used in managerial courses offered in many of the prominent universities. These books contained only superficial discussions of business organization. All had charts depicting the usual Line—Line and Staff—Taylor Functional—Committee—and other combinations of

(continued on next page)



## EDUCATION (cont.)

organizational types. The treatment of this important subject in these textbooks appeared to be more paraphrasings one of another. The whole subject of business organization as presented by our universities at that time had a peculiarly "canned" flavor.

I approached several publishers in Chicago and (during a business trip) in New York. None denied the situation. They explained that business administration courses were in a state of flux. Each publisher had new books under consideration and expressed concern about their acceptance. Because poor organization was such a common source of business problems, it was suggested that these proposed new textbooks be written with emphasis on organization. In fact, business organization could well be the underlying theme of these new books.

The idea appealed to each of them. They asked to have it implemented. So, several sample chapters of managerial courses were prepared and sent to these several publishers. They in turn sent them to the authors, who were supposedly preparing new textbooks, for their appraisal of this new approach. Months ensued. Nothing came of the attempt, except some practice in textbook writing.

### Textbooks Still in Flux

And now, almost 10 years later, I am amazed that the same "canned sterility" exists in the newest management textbooks available in some of our Business Administration courses. In one of these textbooks the chapters were merely re-arranged and little else was done since its last printing. This alone was an improvement. The subject matter now can be presented somewhat more readily from a business organizational point of view. However, representatives of several publishers indicate that the state of flux remains. It has neither "jelled nor crystallized" in almost 10 years. Why not?

Perhaps there is no simple answer. Perhaps course content has not been sufficiently clarified at each university. There is much over-lapping. Moreover, some of the leading schools in business appear to be operating in an aura of the graduate school (rather than at the usual collegiate level) and perhaps are unaware of this situation. Other private schools may prefer to await a clarification before taking any action. The state universities may be restricted similarly. Some of them face further complications, where more than one state university is involved under the laws of one state. Some schools of business call in businessmen for consultation on specific matters. As to this general problem the advice of consulting engineers in the management field would be more useful.

(Perhaps a look at the curricula of other professional schools, i. e., medicine or engineering may help. Each has one or a series of correlated basic courses which serve as a foundation for the re-

mainder of their curriculum. In medicine it is physiology (and anatomy). In engineering it is physics. What should it be in business administration? I believe a satisfactory answer to this question will do much to dispel the "state of flux" which has existed for too long.

Perhaps this question can be answered to better advantage after we consider the question: "Which group of college graduates attain the higher managerial positions today?" The trend seems to be definitely in favor of the engineering graduates—mechanical, electrical, mining and civil engineers. This is rather surprising.

As an engineer rises in the echelons of management his technical and purely engineering skills become less and less important, and the importance of his managerial skills increases very rapidly. Where have these engineers acquired their managerial know-how? Certainly, not at their universities. Their curricula are so loaded with technical courses there is time for little else. Perhaps, because engineering training develops methodical and analytical thinking, the engineer can more easily grasp the sheer importance of organization as a fundamental tool of good management. This, I believe, is an accidental by-product of engineering curricula.

### Engineers Best Managers

The industrial engineering graduate, my consulting engineering colleagues inform me, seems destined to outstrip the other engineering graduates in managerial positions in industry. This seems logical. His training includes enough engineering courses to permit him to know his way around in the production function of business. Moreover, he is trained in production methods, motion and time study, standards and production control. Accounting and control are part of his curriculum. Distribution (sales, etc.) and finance are covered perhaps superficially. But, his engineering approach to problems in these areas of business is very effective. Perhaps, like the other engineers, he may be blessed with a by-product grasp of organizational significance. In short, the industrial engineer actually has an excellent background in business administration.

A few pertinent comments may be of interest at this point. The Germans are generally credited with possessing excellent organizing skills. Could their military training have a bearing on this matter? The Japanese have learned industrial organization surprisingly well—and in a relatively short time. They, too, have been profoundly militaristic. Our own military leaders have done exceptionally well in fields entirely foreign to their formal, academic, military training. Eisenhower, at Columbia (and in subsequent assignments), MacArthur with Remington Rand, General Wood at Sears, Roebuck & Co. are a few examples. Military men no

(continued on next page)



**EDUCATION** (cont.)

only study organization, but they are drilled and drilled in it. I am convinced that skills in organization—business organization—can be acquired through drill, practice, and more drill.

Our freshmen need some basic business course which will give them a solid foundation upon which to build their business careers. This foundation must be adequate to carry all the knowledge, practices, techniques, and skills acquired in all the courses of their curricula. In fact, it must go beyond this. It must serve them well in their post-graduate work—in the business world.

The freshmen in medicine have their basic courses in physiology (and anatomy). Why not dissect business into its major functional parts and teach our freshmen the importance of sound business organizational structure? The freshmen in engineering have a superb basic course in physics. From a simple formula:  $F=MA$  (force equals mass times acceleration) is evolved a vast area of fundamental engineering knowledge. This is developed and expended further in subsequent engineering courses.

We have a very basic definition of business:

**Buying and Selling for Profit at Risk of Loss**

Why not develop (for our freshmen) from this simple definition, the entire organizational structure of a typical business enterprise? It can be done. Moreover, it should be done in a basic course at the freshman level. In fact, such a course should be a substituted for the usual introductory courses now being offered at virtually all university schools of business.

These courses of introduction to business have several shortcomings among which are: They attempt to introduce the freshmen to a very complex business world, in detail, in one course. This is beyond the scope of many of us—certainly beyond the comprehension of freshmen. Operational details and techniques are inevitably introduced. Freshmen have but little in their past experience to which they can attach this new knowledge. Freshman enrollments usually require such courses to be offered in several sections by different faculty members. Each, quite naturally and indvertently, tends to emphasize this introductory course in terms of their respective areas of specializations. Such introductory courses afford no solid foundation upon which freshmen can build their future business careers.

Is the primary objective of business administration curricula that of producing the best managerial timber for business? Such timber is needed from the foreman and other primary supervisory levels up to managerships of every major function and beyond. The development and success of a business enterprise is limited by its top managerial abilities and skills. Management, without adequate and effective organization, is seriously handicapped, li-

imited, and soon becomes inadequate. Likewise, managerial timber cannot be developed fully without the development of adequate organization skills.

**Concerns of Management**

A basic course in business organization for freshmen should be only the beginning of organization skill development. All subsequent courses should be directed toward this goal also. This aspect of a business administration curriculum is most challenging. A broad view of the dynamics of business may help here.

Business is replete with countless activities of people. Management's chief concern is with the control and direction of these activities toward the effective attainment of its objectives, chief among which is profit. These activities are not haphazard in a properly organized business enterprise. Two large categories of these activities flow in "one stream" with the goods and services through production and through distribution to customers. Production and distribution encompass a very large portion of all the activities of any business. To be most effective, they must be properly organized. Thus, the primary organization pattern of any business is established in production and distribution.

Concurrent with the flow of operational activities, through production and distribution, must be a "flow of paper work" to record, measure and report these activities to management for control purposes. This encompasses more than mere book-keeping, more than accounting, cost accounting and kindred matters. It is truly controller-ship. Its activities must reflect those in production and distribution rather precisely. This involves comprehension of their organization. Drill and practice in accounting and kindred subjects can be oriented toward organization.

A third "stream" involves a flow of finances concurrently with the other two. Every activity in a business enterprise involves, among other things, an expense. These expenses flow through production and distribution. Because of this the activity of the Finance Function must reflect this flow of expenses and the organizational structure in which they occur. This encompasses operational finance, which is distinct and separate from ownership finance—that of capital stock (common and preferred) bonds and kindred matters.

The presentation of courses in business for the purpose of developing organization skills resolves itself into a shift of emphasis. The teaching of techniques should not be affected. But the drills, the practices, and more drills should have some additional emphasis to guide the students thinking into organization channels, while practicing the newly learned techniques. Such training can readily impart a professional touch to the students' skills.

(continued on next page)



## EDUCATION (cont.)

Andrew Carnegie, perhaps our greatest industrialist, was a devout believer in sound business organization. He often made statements such as, "If all my mines and mills were destroyed but my organization remains intact, I shall rebuild all, even better, in a relatively short time. But, if my organization is destroyed, then everything is lost."

Mr. Carnegie, doubtless, was referring to more than the business organization structure we have been discussing here. He referred also to the people who staff the structure. This, of course, is of great importance. A perfect business organization would be but an empty shell unless it is staffed by well qualified people. But, the structure can readily indicate many of the qualifications each person must have to fill each key position, in an organization. Courses in psychology and personnel management can be oriented best by organization emphasis.

## Competition Between Managers

In our competitive, free-enterprise, profit system, we are too prone to think that competition is between products and among the services offered for sale. Actually it is not products, not services, but managements which compete with each other. The degree of success any enterprise attains in a direct function of its top managerial capacity. Managerial capacity seems to be directly related to organization skill. At least one very large corporation has recently added an Organizational Department to its staff functionaries. Either the law of diminishing return is taking its toll or the organizing capacity of its top management has reached its limit—perhaps both effects are being felt.

Organizational skill is a prime prerequisite to managerial capacity. Our universities will do well to orient their business curricula to the development of this skill. They will then contribute immeasurably toward the creation of the stuff of which good management is made.

Throughout this discussion questions were asked. Answers to some of these may be worth reconsiderations here.

1. Are businessmen usually well skilled in organization? Probably not. A very large percentage of the problems encountered by consultants in the management field stem from poor business organization.
2. Do our universities develop organization skills particularly for students of business organization? Definitely not. The "state of flux" references by publishers of management text books indicates the guidance they are seeking—perhaps from our universities.
3. Should our business administration curricula and their course contents be examined critically and should changes be made so as to develop organization skills? If answers to

the last question are in the affirmative, the following steps are suggested:

1. Examine the curriculum of every prominent business administration school. (The curricula of our national military services academies should be included.)
2. Review every textbook—particularly those now used in their management courses.
3. Visit several universities and discuss with their professors personally such matters as:
  - a. The objectives and general plan of their respective business administration curricula.
  - b. Areas of specialization—Majors—Minors
  - c. Course contents, particularly of their management offerings.
  - d. Scope of each remaining course; where emphasis, if any, is applied; its relationship to other courses; its contribution to the curriculum plan and to its objectives.
  - e. The development of business organization skills; the courses in which organization can be studied, drilled, and practiced; those courses which require some modification to attain this objective.
4. Similar discussions with the authors and publishers of the textbooks involved.
5. Review the entire subject with the business administration faculty.

Beyond this point lies the realm of definite action.

## LAND USE (cont. from p. 7)

stock will usually entail additional fencing, farm service buildings to accommodate the expanded livestock program, some shift in the complement of machinery and equipment, and, perhaps of even greater importance, improved knowledge of livestock production and marketing practices by the farm operator and his family.

The amount of additional capital outlays will depend upon the type or types of livestock chosen, the relative emphasis given to each and the extent of labor-saving facilities employed. In many communities, the existing agencies may not be fully aware of the capital outlay required to make the shift to more forage and accompanying expansion of livestock enterprises. They may not fully appreciate the characteristics of different livestock enterprises with respect to the rate of capital turnover and risk involved. This will, therefore, necessitate some modification in existing lending policies. Without adequate credit, the shift will be greatly handicapped. Some banks and other credit agencies

(continued on next page)



**LAND USE** (cont.)

already have accepted this new challenge.

It becomes the responsibility of educational institutions in the area to conduct research aimed at (1) providing farmers with data and production methods which will assist them in making adjustments to improved technology and changing economic conditions in order to make the most efficient use of their land, labor and other resources; (2) assisting industry in improving the efficiency with which agricultural products are processed and distributed and in finding additional outlets for agricultural products; and (3) to train young men to become better servants to agriculture either as employees of machinery, equipment, seed, feed, and fertilizer concerns which are continually servicing agricultural plants or as full-time farm operators. The School of Agriculture at Southern Illinois University is rapidly developing improved teaching and research facilities to more adequately meet its responsibility to the area. Our changing technology and economic environment offers a challenge to those engaged in agricultural teaching, research, and area service activities.

J. E. Bixler, president of the Duncan Electric Co., Lafayette, Ind., is quoted by James E. Hard, executive secretary of the Metropolis Chamber of Commerce, as saying that community attitudes and community resources are now among the factors being considered by industries contemplating a move.

In a column in the Metropolis News, Hurd reported on a speech by Bixler. The following is quoted from the newspaper:

"To illustrate his point, Mr. Bixler cited the following experience of a community whose officials asked a large manufacturer why another city had been chosen as a site for their plant in preference to theirs. The answer was direct and to the point...

"1. Too many houses showed lack of upkeep—many of them appearing to have been without paint for twenty five years or more.

"2. Poor traffic control.

"3. Water supply for the vicinity was taken from one river and raw sewage was dumped into another near the junction of the two.

"4. The business district was not kept up—had the appearance of a business center of 1900 vintage.

"5. Hotel and restaurant accommodations were inadequate and poor quality.

"6. Lack of community pride evidenced by decrepit appearance of bridges, etc.

"7. Inadequate schools and hospitals.

"8. Lack of zoning and planning programs in the community.

"Although the manufacturer acknowledged the city's efforts in improving park and recreational facilities, it was pointed out that other conditions made the community generally undesirable—not only for the industry itself—but also for the employees and executives who would move into the community as a result of the plant's location".

—o—

**A LOOK AT FARM CREDIT**

(Condensed from December 1955 issue, Federal Reserve Bank of St. Louis Monthly Review)

Over 90 per cent of the approximately 14,000 commercial banks in the United States extend credit to farmers. During the fall of the year many rural banks look ahead to next year's probable seasonal peak credit needs and, at the same time, evaluate the cyclical and longer-term influences in their farmer-customers' needs. These needs reflect four major historical influences. Briefly, these influence may be characterized as follows: (1) The level of current farm income. (2) The outlook of both farmers and lenders, i. e. expectations as to the future course of agricultural prices and income. (3) Capital investment opportunities in buildings and machinery and possibilities of profitable applications of new techniques. (4) The borrowing capacity of farmers.

These four major influences vary in importance over time, and a marked change in one often results in changes in the others. They have in the past exerted both short-run and long-run forces calling for diverse combinations and magnitudes of credit. An analysis of agricultural credit activity during the past several decades illustrates the shifting, fluctuating impact of these influences.

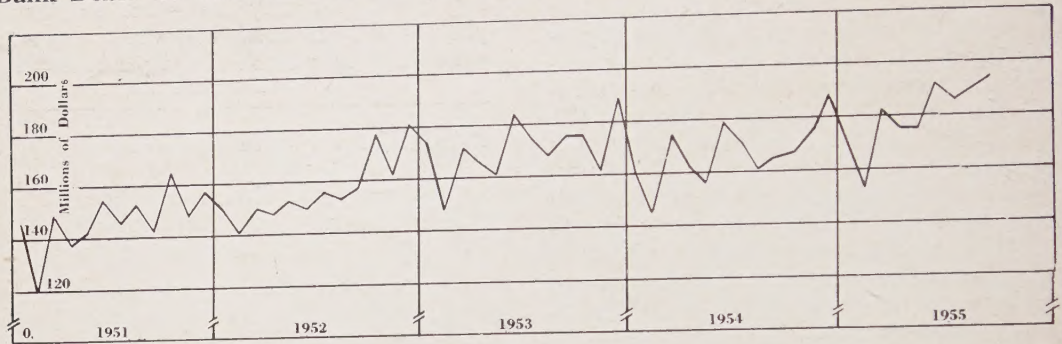
**Farm Credit Demand to Lessen**

Upon the assumption of moderate fluctuations in per capita farm income for a few years, at levels 15 to 20 per cent below the peaks of 1948 and 1951, three influences—outlook, income, and possibly investment needs—may well exert some downward pressure on non-real estate credit volume, new farm mortgage volume recorded, and over a longer period of time, on farm mortgage debts outstanding. Moderating, perhaps offsetting, will be large capital replacement requirements and investment associated with sustained progress in technological developments. The fourth factor, the overall capacity of farmers to incur debts appears as the most certain positive factor in the demand for farm credit in the future.

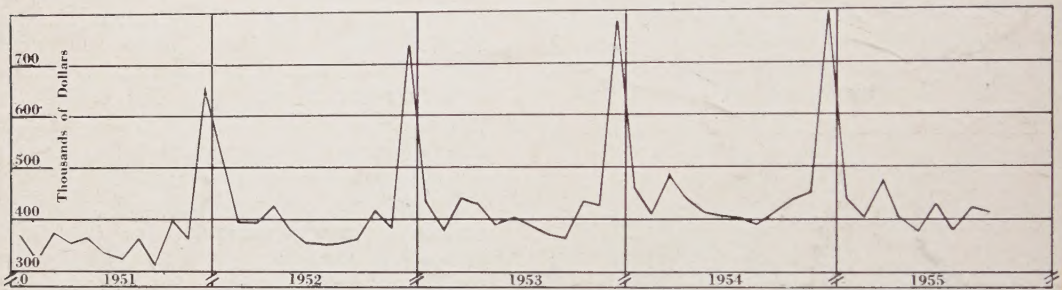
The interaction of these four major influences is likely to result in some reduction in the future demand for new farm credit despite the fact that the capacity of farmers for further borrowing is likely to increase.



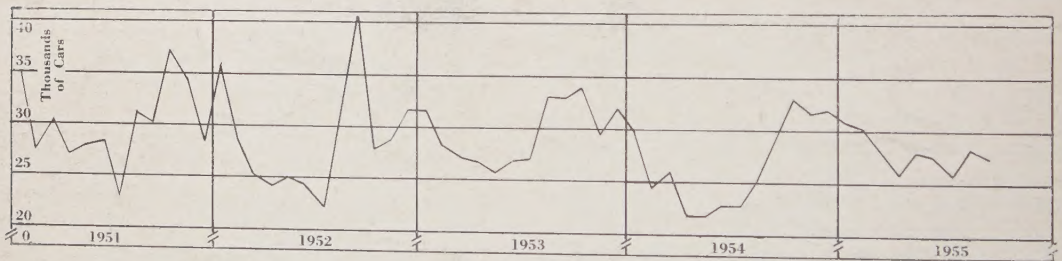
### Bank Debits to Individual Demand Deposit Accounts — Reporting Banks



### Postal Receipts — 34 Southern Counties 74 Postoffices Reporting



### Freight Car Loadings for Unchanging Group of Six R.R.



### Taxable Retail Sales

